

## CLAIMS

1. A method of generating a caricatured image, comprising the steps of:  
receiving an input image to be caricatured;  
5 identifying feature areas on the input image and  
applying respective caricaturing transformations to the identified feature  
areas in the input image so as to generate a caricatured image comprising the  
transformed feature areas.
- 10 2. A method according to claim 1, wherein the caricaturing transformations  
comprise at least one of a scaling transformation and/or a translation transformation.
3. A method according to claims 1 or 2, wherein the applying step further  
comprises, for a point in the input image, determining in which of the identified feature  
15 areas the point lies; and calculating the position which the point should take within the  
caricatured image as a function of the characteristics of the determined feature area  
within the input image, or of the characteristics of a corresponding feature area within  
another image.
- 20 4. A method according to claim 3, and further comprising storing a reference image  
having predefined feature areas, wherein the identifying step further identifies feature  
areas on the input image or on the other image corresponding to the predefined feature  
areas on the reference image, and wherein said characteristics comprise one or more  
ratios of the dimensions of the determined feature area within the input image, or of the  
25 corresponding feature area within the other image, to the corresponding feature area in  
the reference image.
5. A method according to any of the preceding claims, and further comprising  
determining a caricature level defining the amount of caricaturing to be applied to the  
30 input image in dependence on the intended size of the caricature image to be generated;  
and applying the caricaturing transformations in dependence on the determined  
caricature level.

6. A method according to any of the preceding claims, wherein the input image comprises an image of a subject face, the identified feature areas each containing a particular facial feature.
- 5 7. A computer program or suite of computer programs arranged such that when executed by a computer system it/they enable the computer system to operate according to any of the preceding claims.
8. A computer readable storage medium storing the computer program or one or  
10 more of the suite of computer programs according to claim 7.
9. A caricature generation system, comprising:  
an image input means for receiving an input image to be caricatured; and  
processing means arranged in use to:  
15 i) identify feature areas on the input image; and  
ii) apply respective caricaturing transformations to the identified feature areas in the input image so as to generate a caricatured image comprising the transformed feature areas.
- 20 10. A system according to claim 9, wherein the caricaturing transformations comprise at least one of a scaling transformation and/or a translation transformation.
11. A system according to claims 9 or 10, wherein the processing means is further arranged in use to: for a point in the input image, determine in which of the identified  
25 feature areas the point lies; and calculate the position which the point should take within the caricatured image as a function of the characteristics of the determined feature area, or of the characteristics of a corresponding feature area within another image.
12. A system according to claim 11, and further comprising storage means arranged  
30 in use to store a reference image and data defining pre-defined feature areas of the reference image, the processing means being further arranged in use to identify feature areas on the input image corresponding to the predefined feature areas on the reference image; wherein said characteristics comprise one or more ratios of the dimensions of the determined feature area within the input image, or of the corresponding feature area  
35 within the other image, to the corresponding feature area in the reference image.

13. A system according to any of claims 9 to 12, wherein the processing means is further arranged in use to: i) determine a caricature level defining the amount of caricaturing to be applied to the input image in dependence on the intended size of the caricature image to be generated; and ii) apply the caricaturing transformations dependence on the determined caricature level.
14. A system according to any of claims 9 to 13, wherein the input image comprises an image of a subject face, the identified feature areas each containing a particular facial feature.